



# ***STIC Search Report***

## ***Biotech-Chem Library***

**STIC Database Tracking Number: 97136**

**TO: Robert Mondesi  
Location: cm-1/5d16  
Art Unit: 1653  
Friday, June 27, 2003**

**Case Serial Number: 828592**

**From: Mary Jane Ruhl  
Location: Biotech-Chem Library  
CM1-6A06  
Phone: 605-1155**

**[maryjane.ruhl@uspto.gov](mailto:maryjane.ruhl@uspto.gov)**

### **Search Notes**

\$%^STN;HighlightOn= \*\*\*;HighlightOff=\*\*\* ;

=> modified or truncated or mutated

159432 MODIFIED

1 MODIFIEDS

159432 MODIFIED

(MODIFIED OR MODIFIEDS)

20884 TRUNCATED

20888 MUTATED

L1 199233 MODIFIED OR TRUNCATED OR MUTATED

=> H-helix

655974 H

36209 HELIX

160 HELIXES

10065 HELICES

41728 HELIX

(HELIX OR HELIXES OR HELICES)

L2 168 H-HELIX

(H(W)HELIX)

=> anti-thrombin

449575 ANTI

13 ANTIS

449583 ANTI

(ANTI OR ANTIS)

32988 THROMBIN

164 THROMBINS

33020 THROMBIN

(THROMBIN OR THROMBINS)

L3 2764 ANTI-THROMBIN

(ANTI(W)THROMBIN)

=> 11 and 12 and 13

L4 0 L1 AND L2 AND L3

=> 11 and 13

L5 76 L1 AND L3

=> 15 and 12

L6 0 L5 AND L2

=> 11 and 13

L7 76 L1 AND L3

=> d ti 1-10

L7 ANSWER 1 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Biologically engineered protein-graft-poly(ethylene glycol) hydrogels: A  
cell adhesive and plasmin-degradable biosynthetic material for tissue  
repair.

L7 ANSWER 2 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI DNA aptamers as radically new recognition elements for biosensors.

L7 ANSWER 3 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Tissue injury and the inflammatory response to pediatric cardiac surgery  
with cardiopulmonary bypass: A descriptive study.

L7 ANSWER 4 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Different pharmacokinetic and pharmacodynamic properties of tinzaparin  
measured by external calibration curves in a primate model.

L7 ANSWER 5 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Surface modification of polyethylene balloon catheters for local drug  
delivery.

L7 ANSWER 6 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Prothrombotic state and elevated levels of plasminogen activator  
inhibitor-1 in mitral stenosis with and without atrial fibrillation.

L7 ANSWER 7 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Selection of S18326 as a new potent and selective boronic acid direct  
thrombin inhibitor.

L7 ANSWER 8 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Activation of blood coagulation at heparin-coated surfaces.

L7 ANSWER 9 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Probing serpin reactive-loop conformations by proteolytic cleavage.

L7 ANSWER 10 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Synthetic modification of PAN membrane: Biocompatibility and functional characterization.

=> d ti 11-20

L7 ANSWER 11 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Lipophilically \*\*\*modified\*\*\* low molecular mass heparins have improved pharmacodynamic properties.

L7 ANSWER 12 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Immobilization of a lysine-terminated heparin to polyvinyl alcohol.

L7 ANSWER 13 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Heparin binding proteins: Contribution to heparin rebound after cardiopulmonary bypass.

L7 ANSWER 14 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HALISTANOL SULFATES A-E NEW STEROID SULFATES FROM A MARINE SPONGE EPIPOLASIS-SP.

L7 ANSWER 15 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HEPARINASE II FROM FLAVOBACTERIUM-HEPARINUM HPLC ANALYSIS OF THE SACCHARIDES GENERATED FROM CHEMICALLY \*\*\*MODIFIED\*\*\* HEPARINS.

L7 ANSWER 16 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HUMAN ALPHA-1 PROTEINASE INHIBITOR CRYSTAL STRUCTURE ANALYSIS OF 2 CRYSTAL MODIFICATIONS MOLECULAR MODEL AND PRELIMINARY ANALYSIS OF THE IMPLICATIONS FOR FUNCTION.

L7 ANSWER 17 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI PREPARATION OF AN ASYMMETRIC SEMI PERMEABLE MEMBRANE WITH ANTI COAGULANT ACTIVITY.

L7 ANSWER 18 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI INTERACTIONS OF HUMAN PLATELETS WITH INSOLUBLE ANTI COAGULANT \*\*\*MODIFIED\*\*\* POLY STYRENE RESINS.

L7 ANSWER 19 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI REACTION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III WITH THROMBIN BOUND TO THE VASCULAR ENDOTHELIUM ANALYSIS IN A RE CIRCULATING PERFUSED RABBIT HEART PREPARATION.

L7 ANSWER 20 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI ADSORPTION OF PURIFIED THROMBIN OR \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III FOR 2 INSOLUBLE ANTI COAGULANT POLY STYRENE DERIVATIVES 2. COMPETITION WITH THE OTHER PLASMA PROTEINS.

=> d ti 21-31

L7 ANSWER 21 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI CHARACTERIZATION OF THE THROMBIN INDUCED CONTRACTION OF VASCULAR SMOOTH MUSCLE.

L7 ANSWER 22 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI RECEPTOR MEDIATED CHEMO TACTIC RESPONSE OF A MACROPHAGE CELL LINE J-774 TO THROMBIN.

L7 ANSWER 23 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI EFFECTS OF ENZYMATIC DEGLYCOSYLATION ON THE BIOLOGICAL ACTIVITIES OF HUMAN THROMBIN AND \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* .

L7 ANSWER 24 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI PROPERTIES OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* THROMBIN COMPLEX FORMED IN THE PRESENCE AND IN THE ABSENCE OF HEPARIN.

L7 ANSWER 25 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI MONOCYTE CHEMO TAXIS STIMULATION BY SPECIFIC EXOSITE REGION IN THROMBIN EC-3.4.21.5.

L7 ANSWER 26 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI COMPARISON OF IMMUNOCHEMICAL AND BIOLOGICAL PROPERTIES OF HUMAN  
 \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* DURING BLOOD CLOTTING AND UPON INTERACTION  
 WITH EXOGENOUS THROMBIN.

L7 ANSWER 27 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI \*\*\*MODIFIED\*\*\* LEVELS OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III AND  
 CIRCULATING \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III COMPLEXES IN PATIENTS  
 WITH ARGENTINE HEMORRHAGIC FEVER.

L7 ANSWER 28 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III BINDING TO SC-5B-9 ATTACK COMPLEXES  
 OF HUMAN COMPLEMENT DISSOCIATION OF A \*\*\*MODIFIED\*\*\* \*\*\*ANTI\*\*\*  
 \*\*\*THROMBIN\*\*\* III DERIVATIVE SUBSEQUENT TO COMPLEX FORMATION.

L7 ANSWER 29 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI MECHANISM OF THROMBIN BINDING TO ENDOTHELIAL CELLS.

L7 ANSWER 30 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI PRODUCTION IN-VITRO AND PROPERTIES OF A \*\*\*MODIFIED\*\*\* FORM OF BOVINE  
 \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* CLEAVED AT THE ACTIVE SITE BY THROMBIN.

L7 ANSWER 31 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI MECHANISM OF INACTIVATION OF TRYPSIN BY \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\*

=> di ti 32-42  
 205848 DI  
 7567 DIS  
 212829 DI  
 (DI OR DIS)  
 7705 TI  
 674 TIS  
 8325 TI  
 (TI OR TIS)  
 183806 32  
 139152 42  
 L8 0 DI TI 32-42  
 (DI(W)TI(W)32(W)42)

=> d ti 11-20  
 L8 HAS NO ANSWERS  
 L8 0 SEA FILE=BIOSIS ABB=ON PLU=ON DI TI 32-42

=> 15 d ti 32-42  
 MISSING OPERATOR L5 D TI  
 The search profile that was entered contains terms or  
 nested terms that are not separated by a logical operator.

=> 15  
 L9 76 L1 AND L3

=> d ti 32-42

L9 ANSWER 32 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI INTERACTIONS OF ANTI COAGULANT INSOLUBLE \*\*\*MODIFIED\*\*\* POLY STYRENE  
 RESINS WITH PLASMATIC PROTEINS.

L9 ANSWER 33 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI HEPARIN TREATMENT OF MICRO ANGIOPATHIC HEMOLYTIC ANEMIA ASSOCIATED WITH AN  
 EXPERIMENTAL TUMOR.

L9 ANSWER 34 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI REACTION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* WITH PROTEASES NATURE OF THE  
 REACTION WITH TRYPSIN.

L9 ANSWER 35 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI DISTINCTION OF 2 PATHOLOGIC \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* II MOLECULES  
 \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III AALBORG AND \*\*\*ANTI\*\*\*  
 \*\*\*THROMBIN\*\*\* III BUDAPEST.

L9 ANSWER 36 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI THE ACTIVE SITE OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* RELEASE OF THE SAME  
 PROTEOLYTICALLY CLEAVED FORM OF THE INHIBITOR FROM COMPLEXES WITH

FACTOR-IXA: FACTOR X-A THROMBIN.

L9 ANSWER 37 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI THE IN-VIVO METABOLISM OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III AND  
\*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III COMPLEXES.

L9 ANSWER 38 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HUMAN URINARY TRYPSIN INHIBITORS PURIFIED BY AFFINITY CHROMATOGRAPHY ON  
TRYPSIN SEPHAROSE.

L9 ANSWER 39 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI EFFECT OF ORAL CONTRACEPTIVES ON \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III.

L9 ANSWER 40 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI KINETICS OF ELIMINATION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III  
CONCENTRATE IN HEPARINIZED PATIENTS.

L9 ANSWER 41 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI IMMUNOLOGICAL EVIDENCE FOR A PROTEOLYTIC CLEAVAGE AT THE ACTIVE SITE OF  
\*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* IN THE MECHANISM OF INHIBITION OF  
COAGULATION SERINE PROTEASES.

L9 ANSWER 42 OF 76 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HEPARIN BINDING AND PROTEASE INHIBITOR ACTIVITY OF CHEMICALLY  
\*\*\*MODIFIED\*\*\* \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III.

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1653rbm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 Feb 24 PCTGEN now available on STN  
NEWS 4 Feb 24 TEMA now available on STN  
NEWS 5 Feb 26 NTIS now allows simultaneous left and right truncation  
NEWS 6 Feb 26 PCTFULL now contains images  
NEWS 7 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results  
NEWS 8 Mar 24 PATDPAFULL now available on STN  
NEWS 9 Mar 24 Additional information for trade-named substances without  
structures available in REGISTRY  
NEWS 10 Apr 11 Display formats in DGENE enhanced  
NEWS 11 Apr 14 MEDLINE Reload  
NEWS 12 Apr 17 Polymer searching in REGISTRY enhanced  
NEWS 13 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS  
NEWS 14 Apr 21 New current-awareness alert (SDI) frequency in  
WPIDS/WPINDEX/WPIX  
NEWS 15 Apr 28 RDISCLOSURE now available on STN  
NEWS 16 May 05 Pharmacokinetic information and systematic chemical names  
added to PHAR  
NEWS 17 May 15 MEDLINE file segment of TOXCENTER reloaded  
NEWS 18 May 15 Supporter information for ENCOMPAT and ENCOMPLIT updated  
NEWS 19 May 19 Simultaneous left and right truncation added to WSCA  
NEWS 20 May 19 RAPRA enhanced with new search field, simultaneous left and  
right truncation  
NEWS 21 Jun 06 Simultaneous left and right truncation added to CBNB  
NEWS 22 Jun 06 PASCAL enhanced with additional data  
NEWS 23 Jun 20 2003 edition of the FSTA Thesaurus is now available  
NEWS 24 Jun 25 HSDB has been reloaded  
NEWS 25 Jul 16 Data from 1960-1976 added to RDISCLOSURE  
NEWS 26 Jul 21 Identification of STN records implemented  
NEWS 27 Jul 21 Polymer class term count added to REGISTRY  
NEWS 28 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and  
Right Truncation available

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT  
 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0jb(JP),  
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
 NEWS HOURS STN Operating Hours Plus Help Desk Availability  
 NEWS INTER General Internet Information  
 NEWS LOGIN Welcome Banner and News Items  
 NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
 NEWS WWW CAS World Wide Web site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:08:23 ON 01 AUG 2003

=> modified or mutated or substituted  
 THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE  
 Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> file biosis

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.42

FILE 'BIOSIS' ENTERED AT 11:09:13 ON 01 AUG 2003  
 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE COVERS 1969 TO DATE.  
 CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT  
 FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 30 July 2003 (20030730/ED)

=> modified or mutated or substituted

- 159635 MODIFIED
- 1 MODIFIEDS
- 159635 MODIFIED
- (MODIFIED OR MODIFIEDS)
- 20929 MUTATED
- 61452 SUBSTITUTED
- 1 SUBSTITUTEDS
- 61453 SUBSTITUTED
- (SUBSTITUTED OR SUBSTITUTEDS)
- L1 238888 MODIFIED OR MUTATED OR SUBSTITUTED

=> h-helix

- 656516 H
- 36241 HELIX
- 160 HELIXES
- 10078 HELICES
- 41768 HELIX
- (HELIX OR HELIXES OR HELICES)
- L2 168 H-HELIX
- (H(W)HELIX)

=> anti-thrombin

- 449960 ANTI
- 13 ANTIS
- 449968 ANTI
- (ANTI OR ANTIS)
- 33031 THROMBIN
- 164 THROMBINS
- 33063 THROMBIN
- (THROMBIN OR THROMBINS)

=> file biosis  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
74.01	74.22

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 09:14:46 ON 17 JUL 2003  
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE COVERS 1969 TO DATE.  
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 16 July 2003 (20030716/ED)

=>

=> s thrombin  
L1 32897 THROMBIN

=> thrombomodulin  
THROMBOMODULIN IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s thrombomodulin  
L2 2344 THROMBOMODULIN

=> anti-thrombin  
ANTI-THROMBIN IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s anti-thrombin  
448895 ANTI  
32897 THROMBIN  
L3 2745 ANTI-THROMBIN  
(ANTI(W)THROMBIN)

=

=> s (l1(w)l2(p)l3) and inhibi(?)  
MISSING OPERATOR 'INHIBI(?)'  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s (l1(w)l2(p)l3) and inhibi?  
1 L1(W)L2(P)L3  
1131308 INHIBI?  
L4 1 (L1(W)L2(P)L3) AND INHIBI?

=> s l4 not (py>=2001)  
1268186 PY>=2001  
L5 1 L4 NOT (PY>=2001)

=> d trial 1

L5 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 1984:336530 BIOSIS  
DN BA78:73010  
TI INFLUENCE OF PROTEIN C ACTIVATION ON BLOOD COAGULATION AND FIBRINOLYSIS IN  
SQUIRREL MONKEYS SAIMIRI-SCIUREUS.  
AU COLUCCI M; STASSEN J M; COLLEN D  
CS CENTER FOR THROMBOSIS AND VASCULAR RESEARCH, DEPARTMENT OF MEDICAL  
RESEARCH, CAMPUS GASTHUISBERG-K. U. LEUVEN, HERESTRAAT 49, B-3000 LEUVEN,  
BELGIUM.  
SO J CLIN INVEST, (1984) 74 (1), 200-204.  
CODEN: JCINAO. ISSN: 0021-9738.  
FS BA; OLD  
LA English  
AB Protein C is a circulating proenzyme which, upon activation, exerts a

potent anticoagulant activity. Infusion of activated bovine protein C into dogs is accompanied by an increase of circulating tissue plasminogen activator (PA) activity. However, the evidence that human protein C shares a similar profibrinolytic capacity is still lacking. The profibrinolytic properties of human protein C were investigated in squirrel monkeys (*S. sciureus*). Injection of activated human protein C resulted in prolongation of the activated partial thromboplastin time but was not associated with increased fibrinolytic activity of blood. Similarly, activation of endogenous protein C (up to 20-30%) by infusion of thrombin-thrombomodulin complex markedly reduced blood coagulability without being accompanied by an increase of circulating PA activity. The in vivo generated anticoagulant activity was identified as activated protein C by the following observations. It was neutralized by rabbit anti-human protein C-IgG, was slowly \*\*\*inhibited\*\*\* by plasma but not by antithrombin III, was adsorbable on barium citrate and expressed amidolytic activity. Activation of protein C appeared to be selective since other parameters such as thrombin time, platelet count, fibrinogen and factor V levels were unaffected by thrombin-thrombomodulin infusion. Infusion of human plasma derived from whole blood incubated in vitro with human activated protein C also did not induce a fibrinolytic response, suggesting that no 2nd messengers with PA-releasing activity were being generated in blood. In a primate, neither the administration of activated human protein C nor the activation of endogenous protein C are associated with an increase of fibrinolytic activity. These findings question the role of this enzyme in the regulation of PA release in man.

CC Clinical Biochemistry; General Methods and Applications 10006  
 Comparative Biochemistry, General 10010  
 Biochemical studies - General 10060  
 Biochemical studies - Proteins, Peptides and Amino Acids 10064  
 Biochemical studies - Carbohydrates 10068  
 Biophysics - Biocybernetics 10515  
 Enzymes - Physiological studies \*10808  
 Metabolism - Proteins, Peptides and Amino Acids \*13012  
 Blood, Blood-Forming Organs and Body Fluids - Blood and Lymph studies \*15002  
 Blood, Blood-Forming Organs and Body Fluids - Blood Cell studies 15004  
 Routes of Immunization, Infection and Therapy 22100  
 In Vitro studies, Cellular and Subcellular 32600  
 Immunology and Immunochemistry - General; Methods 34502  
 BC Bovidae 85715  
 Canidae 85765  
 Leporidae 86040  
 Cebidae 86200  
 Hominidae 86215  
 IT Miscellaneous Descriptors  
 BOVINE DOG HUMAN RABBIT ANTI HUMAN PROTEIN C IMMUNO GLOBULIN G PLATELET  
 FIBRINOGEN \*\*\*THROMBIN\*\*\* \*\*\*THROMBOMODULIN\*\*\* COMPLEX  
 PLASMINOGEN ACTIVATOR \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III PRO ENZYME  
 2ND MESSENGER  
 RN 9000-94-6 (ANTI THROMBIN)  
 60202-16-6 (PROTEIN C)

=> anti-thrombin  
 2

RECORDS LAST ADDED: 16 July 2003 (20030716/ED)

=> set plurals on perm  
 SET COMMAND COMPLETED

=> set abbr on perm  
 SET COMMAND COMPLETED

=> s thrombin  
 32897 THROMBIN  
 162 THROMBINS  
 L1 32929 THROMBIN  
 (THROMBIN OR THROMBINS)

=> thrombomodulin  
 THROMBOMODULIN IS NOT A RECOGNIZED COMMAND



The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

```
=> s thrombomodulin
      2344 THROMBOMODULIN
        5 THROMBOMODULINS
L2      2344 THROMBOMODULIN
      (THROMBOMODULIN OR THROMBOMODULINS)
```

```
=> s antithrombin
      9827 ANTITHROMBIN
        100 ANTITHROMBINS
L3      9867 ANTITHROMBIN
      (ANTITHROMBIN OR ANTITHROMBINS)
```

```
=> s anti-thrombin or antithrombin
      448895 ANTI
        13 ANTIS
      448903 ANTI
      (ANTI OR ANTIS)
      32897 THROMBIN
        162 THROMBINS
      32929 THROMBIN
      (THROMBIN OR THROMBINS)
      2762 ANTI-THROMBIN
      (ANTI(W)THROMBIN)
      9827 ANTITHROMBIN
        100 ANTITHROMBINS
      9867 ANTITHROMBIN
      (ANTITHROMBIN OR ANTITHROMBINS)
L4      11446 ANTI-THROMBIN OR ANTITHROMBIN
```

```
=> s protein c
      1309040 PROTEIN
      495821 PROTEINS
      1509121 PROTEIN
      (PROTEIN OR PROTEINS)
      992921 C
L5      10682 PROTEIN C
      (PROTEIN(W)C)
```

```
=> s protein(w)c
      1309040 PROTEIN
      495821 PROTEINS
      1509121 PROTEIN
      (PROTEIN OR PROTEINS)
      992921 C
L6      10682 PROTEIN(W)C
```

```
=> s (l1(w)L2 and (l3 or l5)) and inhbi?
      228 L1(W)L2
      620 INHBI?
L7      0 (L1(W)L2 AND (L3 OR L5)) AND INHBI?
```

```
=> s (l1(w)L2 and (l3 or l5))
      228 L1(W)L2
L8      187 (L1(W)L2 AND (L3 OR L5))
```

```
=> s (l1(w)L2 and l4 and l5
UNMATCHED LEFT PARENTHESIS '(L1'
The number of right parentheses in a query must be equal to the
number of left parentheses.
```

```
=> s l1(w)L2 and l4 and l5
      228 L1(W)L2
L9      28 L1(W)L2 AND L4 AND L5
```

```
=> d TI 1-10
```

```
L9 ANSWER 1 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI The role of the amino terminal loop of ***antithrombin*** in the
inhibition of thrombin bound to thrombomodulin.
```

```
L9 ANSWER 2 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI Inhibition of endothelial cell-mediated generation of activated
```

FILE COVERS 1969 TO DATE.  
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 30 July 2003 (20030730/ED)

=> mutants or mutation  
100973 MUTANTS  
159179 MUTATION  
129297 MUTATIONS  
231378 MUTATION  
(MUTATION OR MUTATIONS)

L1 297774 MUTANTS OR MUTATION

=> anti-thrombin  
449960 ANTI  
13 ANTIS  
449968 ANTI  
(ANTI OR ANTIS)  
33031 THROMBIN  
164 THROMBINS  
33063 THROMBIN  
(THROMBIN OR THROMBINS)

L2 2764 ANTI-THROMBIN  
(ANTI(W)THROMBIN)

=> l1 and l2

L3 20 L1 AND L2

=> d ti 1-20

L3 ANSWER 1 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Elevated factor VIII as a cause of thrombophilia.

L3 ANSWER 2 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Prevalence of hypercoagulable disorders in potential kidney transplant recipients.

L3 ANSWER 3 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Acquired activated protein C resistance is associated with the co-existence of anti-prothrombin antibodies and lupus anticoagulant activity in patients with systemic lupus erythematosus.

L3 ANSWER 4 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Genetic thrombophilia and peri-partum liver failure.

L3 ANSWER 5 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The importance of procoagulant screening in patients with inflammatory bowel disease complicated by venous thrombosis.

L3 ANSWER 6 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Construction, expression, and characterization of recombinant hirudin in Escherichia coli.

L3 ANSWER 7 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Hereditary thrombophilia as a cause of Budd-Chiari syndrome: A study from western India.

L3 ANSWER 8 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The risk of recurrent venous thromboembolism among heterozygous carriers of the G20210A prothrombin gene \*\*\*mutation\*\*\*.

L3 ANSWER 9 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The importance of procoagulant screening in patients with inflammatory bowel disease complicated by venous thrombosis.

L3 ANSWER 10 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Characterization of a novel autosomal dominant bleeding disorder in a large kindred from east Texas.

L3 ANSWER 11 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Associated prothrombotic abnormalities in patients with inflammatory bowel disease.

L3 ANSWER 12 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Hypercoagulable thrombophilic defects and hyperhomocysteinemia in patients  
 with recurrent pregnancy loss.

L3 ANSWER 13 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Abdominal venous thrombosis in neonates and infants: Role of prothrombotic  
 risk factors: A multicentre case-control study.

L3 ANSWER 14 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A hypofibrinolytic state in overweight patients with cerebral venous  
 thrombosis and isolated intracranial hypertension.

L3 ANSWER 15 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A phenylalanine 402 to leucine \*\*\*mutation\*\*\* is responsible for a  
 stable inactive conformation of antithrombin.

L3 ANSWER 16 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A NOVEL MISSENSE \*\*\*MUTATION\*\*\* IN THE ANTITHROMBIN III GENE  
 SER349-PRO CAUSING RECURRENT VENOUS THROMBOSIS.

L3 ANSWER 17 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI SITE-DIRECTED MUTAGENESIS OF ARGININE 103 AND LYSINE 185 IN THE PROPOSED  
 GLYCOSAMINOGLYCAN-BINDING SITE OF HEPARIN COFACTOR II.

L3 ANSWER 18 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III-TOYAMA REPLACEMENT OF ARGININE 47 BY  
 CYSTEINE IN HEREDITARY ABNORMAL \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III THAT  
 LACKS HEPARIN BINDING ABILITY.

L3 ANSWER 19 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI \*\*\*MUTATION\*\*\* OF ANTI TRYPSIN TO \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\*  
 ALPHA-1 ANTI TRYPSIN PITTSBURGH A FATAL BLEEDING DISORDER.

L3 ANSWER 20 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI CARBOXY TERMINAL FRAGMENT OF HUMAN ALPHA-1 ANTI TRYPSIN FROM HYDROXYLAMINE  
 CLEAVAGE HOMOLOGY WITH \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III.

=> l1 and l2 and naturally occurring

46572 NATURALLY  
 1911 OCCURING  
 297 NATURALLY OCCURING  
 (NATURALLY(W)OCCURING)

L4 0 L1 AND L2 AND NATURALLY OCCURING

=> naturally with occurring

46572 NATURALLY  
 1911 OCCURING  
 298 NATURALLY WITH OCCURING  
 (NATURALLY(1W)OCCURING)

=> l1 and l2 and l5

L6 0 L1 AND L2 AND L5

=>

=> d ti 1-20

L6 HAS NO ANSWERS

L1 297774 SEA FILE=BIOSIS ABB=ON PLU=ON MUTANTS OR MUTATION  
 L2 2764 SEA FILE=BIOSIS ABB=ON PLU=ON ANTI-THROMBIN  
 L5 298 SEA FILE=BIOSIS ABB=ON PLU=ON NATURALLY WITH OCCURING  
 L6 0 SEA FILE=BIOSIS ABB=ON PLU=ON L1 AND L2 AND L5

=> l1 and l2

L7 20 L1 AND L2

=> d ab 1-10

=>

Connection closed by remote host  
 d ab 15,18

---Logging off of STN---

\*\*\*protein\*\*\* \*\*\*C\*\*\* by direct and \*\*\*antithrombin\*\*\* -dependent  
thrombin inhibitors.

- L9 ANSWER 3 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Inhibition of a thrombin anion-binding exosite-2 mutant by the  
glycosaminoglycan-dependent serpins \*\*\*protein\*\*\* \*\*\*C\*\*\*  
inhibitor and heparin cofactor II.
- L9 ANSWER 4 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Reduced thrombin formation capacity in severe haemophilia is associated  
with hypostimulation of procoagulant and anticoagulant pathways.
- L9 ANSWER 5 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Effect of different types of thrombin inhibitors on \*\*\*thrombin\*\*\* /  
\*\*\*thrombomodulin\*\*\* modulated activation of \*\*\*protein\*\*\* \*\*\*C\*\*\*  
in vitro.
- L9 ANSWER 6 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Role of a 23BP insertion in exon 3 of the endothelial cell \*\*\*protein\*\*\*  
\*\*\*C\*\*\* receptor gene in venous thromboembolism.
- L9 ANSWER 7 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Thrombin inhibitors suppress the \*\*\*thrombin\*\*\* - \*\*\*thrombomodulin\*\*\*  
-mediated generation of activated \*\*\*protein\*\*\* \*\*\*C\*\*\*.
- L9 ANSWER 8 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Association of plasma levels of activated \*\*\*protein\*\*\* \*\*\*C\*\*\*  
with recanalization of the infarct-related coronary artery after  
thrombolytic therapy in acute myocardial infarction.
- L9 ANSWER 9 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI The inactivation of single-chain urokinase-type plasminogen activator by  
thrombin in a plasma milieu: Effect of thrombomodulin.
- L9 ANSWER 10 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI \*\*\*Protein\*\*\* \*\*\*C\*\*\* activation by recombinant thrombomodulin in  
plasma.

=> s 19 not py>=2000  
1845435 PY>=2000  
L10 22 L9 NOT PY>=2000

=> s 19 not py>=2001  
1268186 PY>=2001  
L11 23 L9 NOT PY>=2001

=> d ti 1-10

- L11 ANSWER 1 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Role of a 23BP insertion in exon 3 of the endothelial cell \*\*\*protein\*\*\*  
\*\*\*C\*\*\* receptor gene in venous thromboembolism.
- L11 ANSWER 2 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Thrombin inhibitors suppress the \*\*\*thrombin\*\*\* - \*\*\*thrombomodulin\*\*\*  
-mediated generation of activated \*\*\*protein\*\*\* \*\*\*C\*\*\*.
- L11 ANSWER 3 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Association of plasma levels of activated \*\*\*protein\*\*\* \*\*\*C\*\*\*  
with recanalization of the infarct-related coronary artery after  
thrombolytic therapy in acute myocardial infarction.
- L11 ANSWER 4 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI The inactivation of single-chain urokinase-type plasminogen activator by  
thrombin in a plasma milieu: Effect of thrombomodulin.
- L11 ANSWER 5 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI \*\*\*protein\*\*\* \*\*\*C\*\*\* activation by recombinant thrombomodulin in  
plasma.
- L11 ANSWER 6 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Role of residue 99 at the S2 subsite of factor Xa and activated  
\*\*\*protein\*\*\* \*\*\*C\*\*\* in enzyme specificity.
- L11 ANSWER 7 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Role of the thrombin insertion loop 144-155: Study of thrombin mutations

W148G, K154E and a thrombin-based synthetic peptide.

L11 ANSWER 8 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Deficiency of natural anticoagulants.

L11 ANSWER 9 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Glycosaminoglycan contributions to both \*\*\*protein\*\*\* \*\*\*C\*\*\*  
activation and thrombin inhibition involve a common arginine-rich site in  
thrombin that includes residues arginine 93, 97, and 101.

L11 ANSWER 10 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Estimation of the possible recognition sites for thrombomodulin,  
procoagulant, and anticoagulant proteins around the active center of  
alpha-thrombin.

=> d ti 11-23

L11 ANSWER 11 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI A THROMBIN-BASED PEPTIDE CORRESPONDING TO THE SEQUENCE OF THE  
THROMBOMODULIN-BINDING SITE BLOCKS THE PROCOAGULANT ACTIVITIES OF  
THROMBIN.

L11 ANSWER 12 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI AN ACQUIRED \*\*\*ANTITHROMBIN\*\*\* AUTOANTIBODY DIRECTED TOWARD THE  
CATALYTIC CENTER OF THE ENZYME.

L11 ANSWER 13 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI THE ACTIVATION OF BOVINE \*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* BY FACTOR XA.

L11 ANSWER 14 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI MACROMOLECULAR SPECIFICITY DETERMINANTS ON THROMBIN FOR FIBRINOGEN AND  
THROMBOMODULIN.

L11 ANSWER 15 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI HEMOSTATIC ENZYME GENERATION IN THE BLOOD OF PATIENTS WITH HEREDITARY  
\*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* DEFICIENCY.

L11 ANSWER 16 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI AGING-ASSOCIATED CHANGES IN INDICES OF THROMBIN GENERATION AND  
\*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* ACTIVATION IN HUMANS NORMATIVE AGING STUDY.

L11 ANSWER 17 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI THROMBOMODULIN A COFACTOR OF \*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* ACTIVATION  
ISOLATION CHARACTERIZATION AND APPLICATION FOR LABORATORY MEDICINE.

L11 ANSWER 18 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI THE EFFECT OF \*\*\*ANTITHROMBIN\*\*\* III HEPARIN AND HEPARIN ANTAGONISTS  
ON THE ACTIVITY OF THE \*\*\*THROMBIN\*\*\* - \*\*\*THROMBOMODULIN\*\*\*  
COMPLEX.

L11 ANSWER 19 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI THE INFLUENCE OF \*\*\*ANTITHROMBIN\*\*\* III ON THE \*\*\*PROTEIN\*\*\*  
\*\*\*C\*\*\* ACTIVATION AT THE ENDOTHELIAL CELL SURFACE.

L11 ANSWER 20 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI THE EFFECT OF BOVINE THROMBOMODULIN ON THE SPECIFICITY OF BOVINE THROMBIN.

L11 ANSWER 21 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI INTERACTION OF HUMAN ALPHA THROMBIN AND GAMMA THROMBIN WITH  
\*\*\*ANTITHROMBIN\*\*\* III \*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* AND THROMBOMODULIN.

L11 ANSWER 22 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI INFLUENCE OF \*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* ACTIVATION ON BLOOD COAGULATION  
AND FIBRINOLYSIS IN SQUIRREL MONKEYS SAIMIRI-SCIUREUS.

L11 ANSWER 23 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI A FUNCTIONAL ASSAY OF \*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* IN HUMAN PLASMA.

=> d ab 1-10

L1

RN 9000-94-6D (THROMBIN INHIBITORS)

60202-16-6 ( \*\*\*PROTEIN\*\*\* \*\*\*C\*\*\* )  
9002-04-4 (THROMBIN)  
9005-49-6 (HEPARIN)  
8001-27-2 (HIRUDIN)  
9000-94-6 (THROMBIN INHIBITOR)  
155415-08-0 (INOATRAN)

L3 2764 ANTI-THROMBIN  
(ANTI(W)THROMBIN)

=> 11 and 12 and 13

L4 0 L1 AND L2 AND L3

=> 11 and 12

L5 12 L1 AND L2

=> d ti 1-12

L5 ANSWER 1 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Conformational and dynamic characterization of the molten globule state of  
an apomyoglobin mutant with an altered folding pathway.

L5 ANSWER 2 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification of a major heparin-binding site in kallistatin.

L5 ANSWER 3 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Direct energy transfer to study the 3D structure of non-native proteins:  
AGH complex in molten globule state of apomyoglobin.

L5 ANSWER 4 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structural and functional roles of modules in hemoglobin: substitution of  
module M4 in hemoglobin subunits.

L5 ANSWER 5 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Time-resolved fluorescence studies of the molten globule state of  
apomyoglobin.

L5 ANSWER 6 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Restoration of phosphorylation-dependent regulation to the skeletal muscle  
myosin regulatory light chain.

L5 ANSWER 7 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Unstable alpha-chain hemoglobin variants with factitious beta-thalassemia  
biosynthetic ratio: Hb Questembert (alpha-131(H14) Ser fwdarw Pro) and Hb  
Caen (alpha-132(H15) Val fwdarw Gly).

L5 ANSWER 8 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI ANTIMUTAGENIC ACTIVITY OF SOME SAPONINS ISOLATED FROM CALENDULA-  
OFFICINALIS L. CALENDULA-ARVENSIS L. AND HEDERA-HELIX L.

L5 ANSWER 9 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI OXIDATION OF TRYPTOPHANS IN AN INTERHELICAL HYDROPHOBIC CLUSTER OF  
MYOGLOBIN ALTERS THE THERMODYNAMICS OF THE DENATURATION TRANSITION.

L5 ANSWER 10 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI THE INTERACTION OF FOLYLPOLYGLUTAMATES WITH DEOXYHEMOGLOBIN IDENTIFICATION  
OF THE BINDING SITE.

L5 ANSWER 11 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI GROWTH OF CALLUSES DERIVED FROM SHOOT APICAL MERISTEMS OF ADULT AND  
JUVENILE ENGLISH IVY HEDERA-HELIX.

L5 ANSWER 12 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI STRUCTURE OF HUMAN DEOXY HEMO GLOBIN SPECIFICALLY \*\*\*\*MODIFIED\*\*\*\* WITH  
PYRIDOXAL COMPOUNDS.

=> 13 and 11

L6 84 L3 AND L1

=> d ti 1-20

L6 ANSWER 1 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Biologically engineered protein-graft-poly(ethylene glycol) hydrogels: A  
cell adhesive and plasmin-degradable biosynthetic material for tissue  
repair.

L6 ANSWER 2 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI DNA aptamers as radically new recognition elements for biosensors.

L6 ANSWER 3 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Tissue injury and the inflammatory response to pediatric cardiac surgery  
with cardiopulmonary bypass: A descriptive study.

L6 ANSWER 4 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Different pharmacokinetic and pharmacodynamic properties of tinzaparin  
 measured by external calibration curves in a primate model.

L6 ANSWER 5 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Hirudin analogs, methods of manufacture thereof and anticoagulant  
 compositions having these as active ingredients.

L6 ANSWER 6 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Surface modification of polyethylene balloon catheters for local drug  
 delivery.

L6 ANSWER 7 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Prothrombotic state and elevated levels of plasminogen activator  
 inhibitor-1 in mitral stenosis with and without atrial fibrillation.

L6 ANSWER 8 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Selection of S18326 as a new potent and selective boronic acid direct  
 thrombin inhibitor.

L6 ANSWER 9 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Activation of blood coagulation at heparin-coated surfaces.

L6 ANSWER 10 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Probing serpin reactive-loop conformations by proteolytic cleavage.

L6 ANSWER 11 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Synthetic modification of PAN membrane: Biocompatibility and functional  
 characterization.

L6 ANSWER 12 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Lipophilically \*\*\*modified\*\*\* low molecular mass heparins have  
 improved pharmacodynamic properties.

L6 ANSWER 13 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Immobilization of a lysine-terminated heparin to polyvinyl alcohol.

L6 ANSWER 14 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Heparin binding proteins: Contribution to heparin rebound after  
 cardiopulmonary bypass.

L6 ANSWER 15 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI HALISTANOL SULFATES A-E NEW STEROID SULFATES FROM A MARINE SPONGE  
 EPIPOLASIS-SP.

L6 ANSWER 16 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI HEPARINASE II FROM FLAVOBACTERIUM-HEPARINUM HPLC ANALYSIS OF THE  
 SACCHARIDES GENERATED FROM CHEMICALLY \*\*\*MODIFIED\*\*\* HEPARINS.

L6 ANSWER 17 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI HUMAN ALPHA-1 PROTEINASE INHIBITOR CRYSTAL STRUCTURE ANALYSIS OF 2 CRYSTAL  
 MODIFICATIONS MOLECULAR MODEL AND PRELIMINARY ANALYSIS OF THE IMPLICATIONS  
 FOR FUNCTION.

L6 ANSWER 18 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI PREPARATION OF AN ASYMMETRIC SEMI PERMEABLE MEMBRANE WITH ANTI COAGULANT  
 ACTIVITY.

L6 ANSWER 19 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI INTERACTIONS OF HUMAN PLATELETS WITH INSOLUBLE ANTI COAGULANT  
 \*\*\*MODIFIED\*\*\* POLY STYRENE RESINS.

L6 ANSWER 20 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI REACTION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III WITH THROMBIN BOUND TO  
 THE VASCULAR ENDOTHELIUM ANALYSIS IN A RE CIRCULATING PERFUSED RABBIT  
 HEART PREPARATION.

=> d ti 20-40

L6 ANSWER 20 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI REACTION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III WITH THROMBIN BOUND TO  
 THE VASCULAR ENDOTHELIUM ANALYSIS IN A RE CIRCULATING PERFUSED RABBIT  
 HEART PREPARATION.



L6 ANSWER 21 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI ADSORPTION OF PURIFIED THROMBIN OR \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III  
FOR 2 INSOLUBLE ANTI COAGULANT POLY STYRENE DERIVATIVES 2. COMPETITION  
WITH THE OTHER PLASMA PROTEINS.

L6 ANSWER 22 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI CHARACTERIZATION OF THE THROMBIN INDUCED CONTRACTION OF VASCULAR SMOOTH  
MUSCLE.

L6 ANSWER 23 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI RECEPTOR MEDIATED CHEMO TACTIC RESPONSE OF A MACROPHAGE CELL LINE J-774 TO  
THROMBIN.

L6 ANSWER 24 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI EFFECTS OF ENZYMATIC DEGLYCOSYLATION ON THE BIOLOGICAL ACTIVITIES OF HUMAN  
THROMBIN AND \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\*

L6 ANSWER 25 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI PROPERTIES OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* THROMBIN COMPLEX FORMED IN  
THE PRESENCE AND IN THE ABSENCE OF HEPARIN.

L6 ANSWER 26 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI MONOCYTE CHEMO TAXIS STIMULATION BY SPECIFIC EXOSITE REGION IN THROMBIN  
EC-3.4.21.5.

L6 ANSWER 27 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI COMPARISON OF IMMUNOCHEMICAL AND BIOLOGICAL PROPERTIES OF HUMAN  
\*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* DURING BLOOD CLOTTING AND UPON INTERACTION  
WITH EXOGENOUS THROMBIN.

L6 ANSWER 28 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI \*\*\*MODIFIED\*\*\* LEVELS OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III AND  
CIRCULATING \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III COMPLEXES IN PATIENTS  
WITH ARGENTINE HEMORRHAGIC FEVER.

L6 ANSWER 29 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III BINDING TO SC-5B-9 ATTACK COMPLEXES  
OF HUMAN COMPLEMENT DISSOCIATION OF A \*\*\*MODIFIED\*\*\* \*\*\*ANTI\*\*\*  
\*\*\*THROMBIN\*\*\* III DERIVATIVE SUBSEQUENT TO COMPLEX FORMATION.

L6 ANSWER 30 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI MECHANISM OF THROMBIN BINDING TO ENDOTHELIAL CELLS.

L6 ANSWER 31 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI PRODUCTION IN-VITRO AND PROPERTIES OF A \*\*\*MODIFIED\*\*\* FORM OF BOVINE  
\*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* CLEAVED AT THE ACTIVE SITE BY THROMBIN.

L6 ANSWER 32 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI MECHANISM OF INACTIVATION OF TRYPSIN BY \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\*

L6 ANSWER 33 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI INTERACTIONS OF ANTI COAGULANT INSOLUBLE \*\*\*MODIFIED\*\*\* POLY STYRENE  
RESINS WITH PLASMATIC PROTEINS.

L6 ANSWER 34 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI SUBSTITUTION THERAPY WITH AN \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III  
CONCENTRATE IN SHOCK AND DISSEMINATED INTRA VASCULAR COAGULATION.

L6 ANSWER 35 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI SUBSTITUTION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III IN SHOCK PATIENTS.

L6 ANSWER 36 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI PREPARATION CHARACTERIZATION AND TURNOVER PROPERTIES OF HEPARIN  
\*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III COMPLEXES STABILIZED BY COVALENT  
BONDS.

L6 ANSWER 37 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HEPARIN TREATMENT OF MICRO ANGIOPATHIC HEMOLYTIC ANEMIA ASSOCIATED WITH AN  
EXPERIMENTAL TUMOR.

L6 ANSWER 38 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI REACTION OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* WITH PROTEASES NATURE OF THE  
REACTION WITH TRYPSIN.

L6 ANSWER 39 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI DISTINCTION OF 2 PATHOLOGIC \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* II MOLECULES

L6 ANSWER 40 OF 84 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI THE ACTIVE SITE OF \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* RELEASE OF THE SAME  
 PROTEOLYTICALLY CLEAVED FORM OF THE INHIBITOR FROM COMPLEXES WITH  
 FACTOR-IXA FACTOR X-A THROMBIN.

=> naturally(w)occurring  
     46572 NATURALLY  
     115488 OCCURRING  
        2 OCCURRINGS  
     115490 OCCURRING  
        (OCCURRING OR OCCURRINGS)  
 L7     23135 NATURALLY(W)OCCURRING

=> modified or mutated or substituted  
     159635 MODIFIED  
        1 MODIFIEDS  
     159635 MODIFIED  
        (MODIFIED OR MODIFIEDS)  
     20929 MUTATED  
     61452 SUBSTITUTED  
        1 SUBSTITUTEDS  
     61453 SUBSTITUTED  
        (SUBSTITUTED OR SUBSTITUTEDS)  
 L8     238888 MODIFIED OR MUTATED OR SUBSTITUTED

=> 17 and 18  
 L9     1140 L7 AND L8

=> protein or polypeptide  
     1312730 PROTEIN  
     497420 PROTEINS  
     1513282 PROTEIN  
        (PROTEIN OR PROTEINS)  
     72907 POLYPEPTIDE  
     35764 POLYPEPTIDES  
     95878 POLYPEPTIDE  
        (POLYPEPTIDE OR POLYPEPTIDES)  
 L10    1557524 PROTEIN OR POLYPEPTIDE

=> 110 and 19  
 L11    352 L10 AND L9

=> d ti 1-20

L11 ANSWER 1 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI     \*\*\*Naturally\*\*\* - \*\*\*Occurring\*\*\* DNA Topoisomerase II Inhibitors  
 Induce Formation of DNA-DNA Topoisomerase II Complexes in Hematopoietic  
 Cell Lines.

L11 ANSWER 2 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Low-density lipoprotein and its effect on human blood platelets.

L11 ANSWER 3 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Structural and functional role of helices I and II in rhodopsin. A novel  
 interplay evidenced by mutations at GLY-51 and GLY-89 in the transmembrane  
 domain.

L11 ANSWER 4 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI MICOA, a novel metastasis-associated \*\*\*protein\*\*\* 1 (MTA1)  
 interacting \*\*\*protein\*\*\* coactivator, regulates estrogen  
 receptor-alpha transactivation functions.

L11 ANSWER 5 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI MODIP revisited: Re-evaluation and refinement of an automated procedure  
 for modeling of disulfide bonds in \*\*\*proteins\*\*\* .

L11 ANSWER 6 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Genetically \*\*\*modified\*\*\* plants for improved trace element  
 nutrition.

L11 ANSWER 7 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI HOMOLOGOUS AND HETEROLOGOUS DESENSITIZATION OF A TRIPLE POINT MUTANT OF

- L11 ANSWER 8 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Rumen manipulation to improve animal productivity.
- L11 ANSWER 9 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Cross-linked polymer compositions and methods for their use.
- L11 ANSWER 10 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI WW domain sequence activity relationships identified using ligand recognition propensities of 42 WW domains.
- L11 ANSWER 11 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Evaluation of a modular strategy for the construction of novel polydactyl zinc finger DNA-binding \*\*\*proteins\*\*\* .
- L11 ANSWER 12 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Mechanism of Janus kinase 3-catalyzed phosphorylation of a Janus kinase 1 activation loop peptide.
- L11 ANSWER 13 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Effect of mastitis and related-germ on milk yield and composition during \*\*\*naturally\*\*\* - \*\*\*occurring\*\*\* udder infections in dairy cows.
- L11 ANSWER 14 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Immunoaffinity removal of xenoreactive antibodies using \*\*\*modified\*\*\* dialysis or microfiltration membranes.
- L11 ANSWER 15 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Complex-forming \*\*\*proteins\*\*\* .
- L11 ANSWER 16 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* point mutation alters ERalpha crosstalk with regulatory signaling pathways.
- L11 ANSWER 17 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Taurine as a constituent of mitochondrial tRNAs: New insights into the functions of taurine and human mitochondrial diseases.
- L11 ANSWER 18 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Gene delivery to the eye using adeno-associated viral vectors.
- L11 ANSWER 19 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* mutation in the SLC21A6 gene causing impaired membrane localization of the hepatocyte uptake transporter.
- L11 ANSWER 20 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A novel low-molecular-mass dual-specificity phosphatase, LDP-2, with a \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* substitution that affects substrate specificity.

=> d ti 21-41

- L11 ANSWER 21 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The jaagsiekte sheep retrovirus envelope gene induces transformation of the avian fibroblast cell line DF-1 but does not require a conserved SH2 binding domain.
- L11 ANSWER 22 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Immunosuppressive effects of glucosamine.
- L11 ANSWER 23 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Requirement for Iscs in biosynthesis of all thionucleosides in Escherichia coli.
- L11 ANSWER 24 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Charging of a \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* amber tRNA with lysine by a dedicated aminoacyl-tRNA synthetase from Methanosarcina barkeri.
- L11 ANSWER 25 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification and functional analysis of a \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* E89K mutation in the ABCA1 gene of the WHAM chicken.

L11 ANSWER 26 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Preferential induction of IL-10 in APC correlates with a switch from Th1  
 to Th2 response following infection with a low pathogenic variant of  
 Theiler's virus.

L11 ANSWER 27 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Structure of domain III of the blood-stage malaria vaccine candidate,  
 Plasmodium falciparum apical membrane antigen 1 (AMA1).

L11 ANSWER 28 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI The influence of intramolecular bridges on the dynamics of a  
 \*\*\*protein\*\*\* folding reaction.

L11 ANSWER 29 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A copper-responsive transcription factor, CRF1, mediates copper and  
 cadmium resistance in Yarrowia lipolytica.

L11 ANSWER 30 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Conserved helix 7 tyrosine acts as a multistate conformational switch in  
 the 5HT2C receptor: Identification of a novel "locked-on" phenotype and  
 double revertant mutations.

L11 ANSWER 31 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Preservation and fermentation: Past, present and future.

L11 ANSWER 32 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Antimetabolite incorporation into DNA: Structural and thermodynamic basis  
 for anticancer activity.

L11 ANSWER 33 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Lack of pseudouridine 38/39 in the anticodon arm of yeast cytoplasmic tRNA  
 decreases in vivo recoding efficiency.

L11 ANSWER 34 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Recombinant MVA virus, and the use thereof.

L11 ANSWER 35 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI The human minisatellites MS1, MS32, MS205 and CEB1 integrated into the  
 yeast genome exhibit different degrees of mitotic instability but are all  
 stabilised by RAD27.

L11 ANSWER 36 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Differentiation of prion \*\*\*protein\*\*\* glycoforms from  
 \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* sheep scrapie, sheep-passaged  
 scrapie strains (CH1641 and SSBP1), bovine spongiform encephalopathy (BSE)  
 cases and Romney and Cheviot breed sheep experimentally inoculated with  
 BSE using two monoclonal antibodies.

L11 ANSWER 37 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A semisynthetic glutathione peroxidase with high catalytic efficiency:  
 Selenogluthathione transferase.

L11 ANSWER 38 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Designed transcription factors as structural, functional and therapeutic  
 probes of chromatin in vivo. Fourth in review series on chromatin  
 dynamics.

L11 ANSWER 39 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Sealing or filling tissue defects using polyfunctional crosslinking agents  
 and \*\*\*protein\*\*\* polymers.

L11 ANSWER 40 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Mutation of COOH-terminal lysines in overexpressed alphaB-crystallin  
 abrogates ischemic protection in cardiomyocytes.

L11 ANSWER 41 OF 352 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Genetic stabilization by p53 involves growth regulatory and repair  
 pathways.

=> di 42=62

'62' NOT A VALID FIELD CODE

L12 0 DI 42=62

=> naturally(w)occurring  
 46572 NATURALLY

115488 OCCURRING  
2 OCCURRINGS  
115490 OCCURRING  
(OCCURRING OR OCCURRINGS)  
L13 23135 NATURALLY(W)OCCURRING

=> naturally(w)occurring(w)mutation  
46572 NATURALLY  
115488 OCCURRING  
2 OCCURRINGS  
115490 OCCURRING  
(OCCURRING OR OCCURRINGS)  
159179 MUTATION  
129297 MUTATIONS  
231378 MUTATION  
(MUTATION OR MUTATIONS)  
L14 317 NATURALLY(W)OCCURRING(W)MUTATION

=> protein or polypeptide  
1312730 PROTEIN  
497420 PROTEINS  
1513282 PROTEIN  
(PROTEIN OR PROTEINS)  
72907 POLYPEPTIDE  
35764 POLYPEPTIDES  
95878 POLYPEPTIDE  
(POLYPEPTIDE OR POLYPEPTIDES)  
L15 1557524 PROTEIN OR POLYPEPTIDE

=> l14 and l15  
L16 161 L14 AND L15

=> d ti 1-20

L16 ANSWER 1 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Cytokine response to endotoxin in individuals heterozygous for the DELTA32  
mutation of chemokine receptor CCR5.

L16 ANSWER 2 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A Conserved Region of Human Vitamin K-Dependent Carboxylase between  
Residues 393-404 Is Important for Its Interaction with the Glutamate  
Substrate.

L16 ANSWER 3 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structural and functional role of helices I and II in rhodopsin. A novel  
interplay evidenced by mutations at GLY-51 and GLY-89 in the transmembrane  
domain.

L16 ANSWER 4 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI MICOA, a novel metastasis-associated \*\*\*protein\*\*\* 1 (MTA1)  
interacting \*\*\*protein\*\*\* coactivator, regulates estrogen  
receptor-alpha transactivation functions.

L16 ANSWER 5 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI MISSENSE MUTATIONS IN INSULIN - DEGRADING ENZYME ASSOCIATED WITH A  
DIABETIC PHENOTYPE IN RATS DECREASE Abeta DEGRADATION IN BRAIN.

L16 ANSWER 6 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* \*\*\*mutation\*\*\* in an  
ATP-binding domain of the recombination repair gene XRCC3 ablates its  
function without causing cancer susceptibility.

L16 ANSWER 7 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI SF1 in the development of the adrenal gland and gonads.

L16 ANSWER 8 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A new clinical condition linked to a novel mutation in lamins A and C with  
generalized lipodystrophy, insulin-resistant diabetes, disseminated  
leukodermic papules, liver steatosis, and cardiomyopathy.

L16 ANSWER 9 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Biosynthesis, glycosylation, and enzymatic processing in vivo of human  
tripeptidyl-peptidase I.

L16 ANSWER 10 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Characterisation of a \*\*\*naturally\*\*\* \*\*\*occurring\*\*\*

\*\*\*mutation\*\*\* (L107I) in the HNF1alpha (MODY3) gene.

- L16 ANSWER 11 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Two \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* \*\*\*mutations\*\*\* on FVII  
gene (S363I-W364C) altering intrinsic catalytic activity.
- L16 ANSWER 12 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A \*\*\*naturally\*\*\* \*\*\*occurring\*\*\* \*\*\*mutation\*\*\* in the  
SLC21A6 gene causing impaired membrane localization of the hepatocyte  
uptake transporter.
- L16 ANSWER 13 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The osteopetrotic mutation toothless (tl) is a loss-of-function frameshift  
mutation in the rat Csf1 gene: Evidence of a crucial role for CSF-1 in  
osteoclastogenesis and endochondral ossification.
- L16 ANSWER 14 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structure-function analysis of the glucose-6-phosphate transporter  
deficient in glycogen storage disease type Ib.
- L16 ANSWER 15 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structural aspects of luteinizing hormone receptor: Information from  
molecular modeling and mutagenesis.
- L16 ANSWER 16 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI \*\*\*Naturally\*\*\* \*\*\*occurring\*\*\* \*\*\*mutations\*\*\* near precore  
translational initiation site reduce hepatitis B E antigen production.
- L16 ANSWER 17 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A novel mutation in helix 12 of the vitamin D receptor impairs coactivator  
interaction and causes hereditary 1,25-dihydroxyvitamin D-resistant  
rickets without alopecia.
- L16 ANSWER 18 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structure of domain III of the blood-stage malaria vaccine candidate,  
Plasmodium falciparum apical membrane antigen 1 (AMA1).
- L16 ANSWER 19 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI \*\*\*Naturally\*\*\* \*\*\*occurring\*\*\* \*\*\*mutations\*\*\* at the  
acetylcholine receptor binding site independently alter ACh binding and  
channel gating.
- L16 ANSWER 20 OF 161 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI \*\*\*Naturally\*\*\* \*\*\*occurring\*\*\* \*\*\*mutations\*\*\* in the largest  
extracellular loops of ABCA1 can disrupt its direct interaction with  
apolipoprotein A-I.

=>  
RECORDS LAST ADDED: 30 July 2003 (20030730/ED)

=> mutation  
159179 MUTATION  
129297 MUTATIONS  
L1 231378 MUTATION  
(MUTATION OR MUTATIONS)

=> anti-thrombin  
449960 ANTI  
13 ANTIS  
449968 ANTI  
(ANTI OR ANTIS)  
33031 THROMBIN  
164 THROMBINS  
33063 THROMBIN  
(THROMBIN OR THROMBINS)  
L2 2764 ANTI-THROMBIN  
(ANTI(W)THROMBIN)

=> 11 and 12  
L3 20 L1 AND L2

=  
REACTIVE LOOP; STABILITY

=> mutated or mutation  
20929 MUTATED  
159179 MUTATION  
129297 MUTATIONS  
231378 MUTATION  
(MUTATION OR MUTATIONS)  
L1 241056 MUTATED OR MUTATION

=> anti-thrombin  
449960 ANTI  
13 ANTIS  
449968 ANTI  
(ANTI OR ANTIS)  
33031 THROMBIN  
164 THROMBINS  
33063 THROMBIN  
(THROMBIN OR THROMBINS)  
L2 2764 ANTI-THROMBIN  
(ANTI(W)THROMBIN)

=> l1 and l2  
L3 20 L1 AND L2

=> d ti 1-20

L3 ANSWER 1 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Elevated factor VIII as a cause of thrombophilia.

L3 ANSWER 2 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Prevalence of hypercoagulable disorders in potential kidney transplant recipients.

L3 ANSWER 3 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Acquired activated protein C resistance is associated with the co-existence of anti-prothrombin antibodies and lupus anticoagulant activity in patients with systemic lupus erythematosus.

L3 ANSWER 4 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Genetic thrombophilia and peri-partum liver failure.

L3 ANSWER 5 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The importance of procoagulant screening in patients with inflammatory bowel disease complicated by venous thrombosis.

L3 ANSWER 6 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Construction, expression, and characterization of recombinant hirudin in Escherichia coli.

L3 ANSWER 7 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Hereditary thrombophilia as a cause of Budd-Chiari syndrome: A study from western India.

L3 ANSWER 8 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The risk of recurrent venous thromboembolism among heterozygous carriers of the G20210A prothrombin gene \*\*\*mutation\*\*\* .

L3 ANSWER 9 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The importance of procoagulant screening in patients with inflammatory bowel disease complicated by venous thrombosis.

L3 ANSWER 10 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Characterization of a novel autosomal dominant bleeding disorder in a large kindred from east Texas.

L3 ANSWER 11 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Associated prothrombotic abnormalities in patients with inflammatory bowel disease.

L3 ANSWER 12 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Hypercoagulable thrombophilic defects and hyperhomocysteinemia in patients with recurrent pregnancy loss.

L3 ANSWER 13 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Abdominal venous thrombosis in neonates and infants: Role of prothrombotic risk factors: A multicentre case-control study.

L3 ANSWER 14 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A hypofibrinolytic state in overweight patients with cerebral venous  
 thrombosis and isolated intracranial hypertension.

L3 ANSWER 15 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A phenylalanine 402 to leucine \*\*\*mutation\*\*\* is responsible for a  
 stable inactive conformation of antithrombin.

L3 ANSWER 16 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI A NOVEL MISSENSE \*\*\*MUTATION\*\*\* IN THE ANTITHROMBIN III GENE  
 SER349-PRO CAUSING RECURRENT VENOUS THROMBOSIS.

L3 ANSWER 17 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI SITE-DIRECTED MUTAGENESIS OF ARGININE 103 AND LYSINE 185 IN THE PROPOSED  
 GLYCOSAMINOGLYCAN-BINDING SITE OF HEPARIN COFACTOR II.

L3 ANSWER 18 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III-TOYAMA REPLACEMENT OF ARGININE 47 BY  
 CYSTEINE IN HEREDITARY ABNORMAL \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III THAT  
 LACKS HEPARIN BINDING ABILITY.

L3 ANSWER 19 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI \*\*\*MUTATION\*\*\* OF ANTI TRYPSIN TO \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\*  
 ALPHA-1 ANTI TRYPSIN PITTSBURGH A FATAL BLEEDING DISORDER.

L3 ANSWER 20 OF 20 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI CARBOXY TERMINAL FRAGMENT OF HUMAN ALPHA-1 ANTI TRYPSIN FROM HYDROXYLAMINE  
 CLEAVAGE HOMOLOGY WITH \*\*\*ANTI\*\*\* \*\*\*THROMBIN\*\*\* III.

=> d all 18,16,15

RECORDS LAST ADDED: 30 July 2003 (20030730/ED)

=> mutation()analysis and polypeptide  
 159179 MUTATION  
 129297 MUTATIONS  
 231378 MUTATION  
 (MUTATION OR MUTATIONS)  
 1282130 ANALYSIS  
 9 ANALYSES  
 181186 ANALYSES  
 1395433 ANALYSIS  
 (ANALYSIS OR ANALYSES OR ANALYSES)  
 4851 MUTATION(W)ANALYSIS  
 72907 POLYPEPTIDE  
 35764 POLYPEPTIDES  
 95878 POLYPEPTIDE  
 (POLYPEPTIDE OR POLYPEPTIDES)  
 L1 66 MUTATION(W)ANALYSIS AND POLYPEPTIDE

=> d ti 1-20

L1 ANSWER 1 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Xanthophyll binding sites of the CP29 (Lhcb4) subunit of higher plant  
 Photosystem II investigated by domain swapping and \*\*\*mutation\*\*\*  
 \*\*\*analysis\*\*\*

L1 ANSWER 2 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Episodic bioavailability of environmental mercury: Implications for  
 biotechnological control of mercury pollution.

L1 ANSWER 3 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI cDNA cloning, expression profile and genomic structure of a novel human  
 transcript on chromosome 10q24, and its analyses as a candidate gene for  
 infantile onset spinocerebellar ataxia.

L1 ANSWER 4 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Discrimination between agonists and antagonists by the  
 alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid-selective  
 glutamate receptor. A \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* of the  
 ligand-binding domain of GluR-D subunit.

L1 ANSWER 5 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN



TI Physical mapping and characterization of the human Na,K-ATPase isoform, ATP1A4.

L1 ANSWER 6 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Chromophore organization in the higher-plant photosystem II antenna protein CP26.

L1 ANSWER 7 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Characterization and identification of promoter elements in the mouse COX17 gene.

L1 ANSWER 8 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI \*\*\*Mutation\*\*\* \*\*\*analysis\*\*\* of thyroid peroxidase gene in Chinese patients with total iodide organification defect: Identification of five novel mutations.

L1 ANSWER 9 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Versican interacts with fibrillin-1 and links extracellular microfibrils to other connective tissue networks.

L1 ANSWER 10 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Apparent genotype-phenotype correlation in childhood, adolescent, and adult Chediak-Higashi syndrome.

L1 ANSWER 11 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Deletion of the cytoplasmatic domain of BP180/collagen XVII causes a phenotype with predominant features of epidermolysis bullosa simplex.

L1 ANSWER 12 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification of a trafficking determinant localized to the Kv1 potassium channel pore.

L1 ANSWER 13 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Epidermolysis bullosa with congenital pyloric atresia: Novel mutations in the beta4 integrin gene (ITGB4) and genotype/phenotype correlations.

L1 ANSWER 14 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structure/function studies on Ost4p, a subunit of oligosaccharyl transferase.

L1 ANSWER 15 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The complete form of X-linked congenital stationary night blindness is caused by mutations in a gene encoding a leucine-rich repeat protein.

L1 ANSWER 16 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI trans-Acting mutations in loci other than kdpDE that affect kdp operon regulation in Escherichia coli: Effects of cytoplasmic thiol oxidation status and nucleoid protein H-NS on kdp expression.

L1 ANSWER 17 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A novel CFTR frame-shift mutation, 935delA, in two Hispanic cystic fibrosis patients.

L1 ANSWER 18 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification of functionally important domains in the N-terminal region of telomerase reverse transcriptase.

L1 ANSWER 19 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A new approach to gene \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* using "GFP-display.

L1 ANSWER 20 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Genetic studies of three Japanese patients with p22-phox-deficient chronic granulomatous disease: Detection of a possible common mutant CYBA allele in Japan and a genotype-phenotype correlation in these patients.

=> d ab 19,18,15,13

L1 ANSWER 19 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
AB The unique behavior of green fluorescent protein (GFP) on SDS-PAGE was applied to the detection of a single amino acid substitution in GFP-tagged \*\*\*polypeptides\*\*\*. This simple detection method using SDS/urea gels was designated GFP-display. The N-terminal 18 or 37 amino acids of K-Ras was used as a model GFP-tagged \*\*\*polypeptide\*\*\*. K-ras exon 1 was fused to a gfp cDNA at each end and expressed in Escherichia coli. Amino acid

number 12 of K-Ras (wild type; Gly) was changed to Ser, Arg, Cys, Asp, Ala, or Val, and the mobility shift of the greenish fluorescent bands in the SDS/urea gel was analyzed. These mutants were easily detected by GFP-display; however, detection depended strongly on the urea concentration and electrophoresis temperature. Subsequently, GFP-display was applied to the 36 amino acids encoding human p53 exon 7. Amino acid number 248 (wild type; Arg) was changed to Gly, Trp, Gln, Pro, or Leu, and similar mobility shifts were observed. GFP-display could be coupled with an in vitro translation system. Fluorescent active GFP and GFP-Ras fusion proteins were synthesized within a few hours. GFP-display shows potential as a modern approach to gene \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* at the protein level, and is a useful method for protein engineering studies.

L1 ANSWER 18 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
AB Telomerase is a ribonucleoprotein reverse transcriptase responsible for the maintenance of one strand of telomere terminal repeats. The key protein subunit of the telomerase complex, known as TERT, possesses reverse transcriptase-like motifs that presumably mediate catalysis. These motifs are located in the C-terminal region of the \*\*\*polypeptide\*\*\*. Hidden Markov model-based sequence analysis revealed in the N-terminal region of all TERTs the presence of four conserved motifs, named GQ, CP, QFP, and T. Point \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* of conserved residues confirmed the functional importance of the GQ motif. In addition, the distinct phenotypes of the GQ mutants suggest that this motif may play at least two distinct functions in telomere maintenance. Deletion analysis indicates that even the most N-terminal nonconserved region of yeast TERT (N region) is required for telomerase function. This N region exhibits a nonspecific nucleic acid binding activity that probably reflects an important physiologic function. Expression studies of various portions of the yeast TERT in *Escherichia coli* suggest that the N region and the GQ motif together may constitute a stable domain. We propose that all TERTs may have a bipartite organization, with an N-GQ domain connected to the other motifs through a flexible linker.

L1 ANSWER 15 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
AB X-linked congenital stationary night blindness (XLCSNB) is characterized by impaired scotopic vision with associated ocular symptoms such as myopia, hyperopia, nystagmus and reduced visual acuity. Genetic mapping in families with XLCSNB revealed two different loci on the proximal short arm of the X chromosome. These two genetic subtypes can be distinguished on the basis of electroretinogram (ERG) responses and psychophysical testing as a complete (CSNB1) and an incomplete (CSNB2) form. The CSNB1 locus has been mapped to a 5-cM linkage interval in Xp11.4 (refs 2,5-7). Here we construct and analyse a contig between the markers DXS993 and DXS228, leading to the identification of a new gene mutated in CSNB1 patients. It is partially deleted in 3 families and \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* in a further 21 families detected another 13 different mutations. This gene, designated NYX, encodes a protein of 481 amino acids (nyctalopin) and is expressed at low levels in tissues including retina, brain, testis and muscle. The predicted \*\*\*polypeptide\*\*\* is a glycosylphosphatidylinositol (GPI)-anchored extracellular protein with 11 typical and 2 cysteine-rich, leucine-rich repeats (LRRs). This motif is important for protein-protein interactions and members of the LRR superfamily are involved in cell adhesion and axon guidance. Future functional analysis of nyctalopin might therefore give insight into the fine-regulation of cell-cell contacts in the retina.

L1 ANSWER 13 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
AB Epidermolysis bullosa with pyloric atresia (EB-PA: OMIM 226730), also known as Carmi syndrome, is a rare autosomal recessive genodermatosis that manifests with neonatal mucocutaneous fragility associated with congenital pyloric atresia. The disease is frequently lethal within the first year, but nonlethal cases have been reported. Mutations in the genes encoding subunit \*\*\*polypeptides\*\*\* of the alpha6beta4 integrin (ITGA6 and ITGB4) have been demonstrated in EB-PA patients. To extend the repertoire of mutations and to identify genotype-phenotype correlations, we examined seven new EB-PA families, four with lethal and three with nonlethal disease variants. DNA from patients was screened for mutations using heteroduplex analysis followed by nucleotide sequencing of PCR products spanning all beta4 integrin-coding sequences. \*\*\*Mutation\*\*\* \*\*\*analysis\*\*\* disclosed 12 distinct mutations, 11 of them novel. Four mutations predicted a premature termination codon as a result of nonsense mutations or small out-of-frame insertions or deletions, whereas seven were missense mutations. This brings the total number of distinct ITGB4 mutations to 33. The mutation database indicates that premature termination codons are associated predominantly with the lethal EB-PA

variants; whereas missense mutations are more prevalent in nonlethal forms. However, the consequences of the missense mutations are position dependent, and substitutions of highly conserved amino acids may have lethal consequences. In general, indirect immunofluorescence studies of affected skin revealed negative staining for beta4 integrin in lethal cases and positive, but attenuated, staining in nonlethal cases and correlated with clinical phenotype. The data on specific mutations in EB-PA patients allows prenatal testing and preimplantation genetic diagnosis in families at risk.

=> d ti 21-41

- L1 ANSWER 21 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI A novel mutation in the helix termination motif of keratin K12 in a US family with Meesmann corneal dystrophy.
- L1 ANSWER 22 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Mutation screening of the entire coding regions of the TSC1 and the TSC2 gene with the protein truncation test (PTT) identifies frequent splicing defects.
- L1 ANSWER 23 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Alpha-tectorin involvement in hearing disabilities: One gene - two phenotypes.
- L1 ANSWER 24 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Evaluation of the protein truncation test and mutation detection in the NF1 gene: Mutational analysis of 15 known and 40 unknown mutations.
- L1 ANSWER 25 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The neoxanthin binding site of the major light harvesting complex (LHCII) from higher plants.
- L1 ANSWER 26 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification of a mutation cluster in mevalonate kinase deficiency, including a new mutation in a patient of Mennonite ancestry.
- L1 ANSWER 27 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Familial porphyria cutanea tarda: Characterization of seven novel uroporphyrinogen decarboxylase mutations and frequency of common hemochromatosis alleles.
- L1 ANSWER 28 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structural elements in domain IV that influence biophysical and pharmacological properties of human alpha1A-containing high-voltage-activated calcium channels.
- L1 ANSWER 29 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI The mitochondrial genome: Structure, transcription, translation and replication.
- L1 ANSWER 30 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Proliferating cell nuclear antigen and transforming growth factor alpha expression as biomarkers of colon cancer chemoprevention in rats.
- L1 ANSWER 31 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Cloning, mapping, expression, function, and \*\*\*mutation\*\*\*  
\*\*\*analyses\*\*\* of the human ortholog of the hamster putative tumor suppressor gene doc-1.
- L1 ANSWER 32 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Pheochromocytoma in von Hippel-Lindau disease: Clinical presentation and  
\*\*\*mutation\*\*\* \*\*\*analysis\*\*\* in a large, multigenerational kindred.
- L1 ANSWER 33 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Cloning and nucleotide sequence of the DNA gyrase gyrA gene from Serratia marcescens and characterization of mutations in gyrA of quinolone-resistant clinical isolates.
- L1 ANSWER 34 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Bipartite nuclear localization signals in the C terminus of human topoisomerase IIalpha.
- L1 ANSWER 35 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Potato leafroll virus binds to the equatorial domain of the aphid

endosymbiotic groEL homolog.

L1 ANSWER 36 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI How do VIP, PACAP and related peptides interact with receptors.

L1 ANSWER 37 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Isolation, mapping, and \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* of a human  
cDNA homologous to the doc-I gene of the Chinese hamster, a candidate  
tumor suppressor for oral cancer.

L1 ANSWER 38 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Gene cloning and regulation of gene expression of the puc operon from  
Rhodovulum sulfidophilum.

L1 ANSWER 39 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI HPV16 E6 oncoprotein stimulates the transforming growth factor-beta-1  
promoter in fibroblasts through a specific GC-rich sequence.

L1 ANSWER 40 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Molecular analysis of the replication elements of the broad-host-range  
RepA/C replicon.

L1 ANSWER 41 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification and \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* of the complete  
gene for Chediak-Higashi syndrome.

=> d ti 41-66

L1 ANSWER 41 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Identification and \*\*\*mutation\*\*\* \*\*\*analysis\*\*\* of the complete  
gene for Chediak-Higashi syndrome.

L1 ANSWER 42 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI X-ray structure analysis of an engineered Fe-superoxide dismutase Gly-Ala  
mutant with significantly reduced stability to denaturant.

L1 ANSWER 43 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Localization of the binding site for the monocyte immunoglobulin (Ig) A-Fc  
receptor (CD89) to the domain boundary between C-alpha-2 and C-alpha-3 in  
human IgA1.

L1 ANSWER 44 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Compound heterozygosity for COL7A1 mutations in twins with dystrophic  
epidermolysis bullosa: A recessive paternal deletion/insertion mutation  
and a dominant negative maternal glycine substitution result in a severe  
phenotype.

L1 ANSWER 45 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Two site-directed mutations abrogate enzyme activity but have different  
effects on the conformation and cellular content of the  
N-acetylgalactosamine 4-sulphatase protein.

L1 ANSWER 46 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Transcriptional regulation of the cryIVD gene operon from Bacillus  
thuringiensis subsp. israelensis.

L1 ANSWER 47 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Cloning and characterization of MgtE, a putative new class of Mg-2+  
transporter from Bacillus firmus OF4.

L1 ANSWER 48 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Cloning of the beta-3 chain gene (LAMB3) of human laminin 5, a candidate  
gene in junctional epidermolysis bullosa.

L1 ANSWER 49 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Structural requirements for dimerization, glycosylation, secretion, and  
biological function of VPF/VEGF.

L1 ANSWER 50 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Crystal structure of a tethered dimer of HIV-1 proteinase complexed with  
an inhibitor.

L1 ANSWER 51 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Substrate requirements of hepatitis C virus serine proteinase for  
intermolecular \*\*\*polypeptide\*\*\* cleavage in Escherichia coli.

L1 ANSWER 52 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Marked complex I deficiency in patients harboring the np 14459 ND6  
 mitochondrial DNA mutation associated with Leber hereditary optic  
 neuropathy and dystonia.

L1 ANSWER 53 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Recurrent nonsense mutations within the type VII collagen gene in patients  
 with severe recessive dystrophic epidermolysis bullosa.

L1 ANSWER 54 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI The human astrovirus RNA-dependent RNA polymerase coding region is  
 expressed by ribosomal frameshifting.

L1 ANSWER 55 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI The relationship between carotenoid biosynthesis and the assembly of the  
 light-harvesting LH2 complex in Rhodobacter sphaeroides.

L1 ANSWER 56 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Cloning of higher plant omega-3 fatty acid desaturases.

L1 ANSWER 57 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Interaction of barnase with its \*\*\*polypeptide\*\*\* inhibitor barstar  
 studied by protein engineering.

L1 ANSWER 58 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Fusion of the erythropoietin receptor and the Friend spleen focus-forming  
 virus gp55 glycoprotein transforms a factor-dependent hematopoietic cell  
 line.

L1 ANSWER 59 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Two 3',5'-cyclic-adenosine monophosphate response elements in the promoter  
 region of the human gastric inhibitory \*\*\*polypeptide\*\*\* gene.

L1 ANSWER 60 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI Cloning and characterization of genes involved in the biosynthesis of  
 delta-aminolevulinic acid in Escherichia coli.

L1 ANSWER 61 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI IDENTIFICATION OF A HEPARIN-BINDING GROWTH FACTOR-1 NUCLEAR TRANSLOCATION  
 SEQUENCE BY DELETION \*\*\*MUTATION\*\*\* \*\*\*ANALYSIS\*\*\* .

L1 ANSWER 62 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI NF-I PROTEINS FROM BRAIN INTERACT WITH THE PROENKEPHALIN CYCLIC AMP  
 INDUCIBLE ENHANCER.

L1 ANSWER 63 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI CUCUMBER MOSAIC VIRUS SATELLITE RNA Y STRAIN ANALYSIS OF SEQUENCES WHICH  
 AFFECT YELLOW MOSAIC SYMPTOMS ON TOBACCO.

L1 ANSWER 64 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI HMG I-LIKE PROTEINS FROM LEAF AND NODULE NUCLEI INTERACT WITH DIFFERENT AT  
 MOTIFS IN SOYBEAN NODULIN PROMOTERS.

L1 ANSWER 65 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI IDENTIFICATION OF A DOWNSTREAM SEQUENCE AND BINDING PROTEIN THAT REGULATE  
 ADENOVIRUS MAJOR LATE PROMOTER TRANSCRIPTION IN-VITRO.

L1 ANSWER 66 OF 66 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 TI MOLECULAR GENETICS OF HERPES SIMPLEX VIRUS 6. CHARACTERIZATION OF A  
 TEMPERATURE SENSITIVE MUTANT DEFECTIVE IN THE EXPRESSION OF ALL EARLY  
 VIRAL GENE PRODUCTS.

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=> amino()acids or peptides  
 481913 AMINO  
 9 AMINOS  
 481918 AMINO  
 (AMINO OR AMINOS)  
 296799 ACIDS  
 143407 AMINO(W)ACIDS  
 114497 PEPTIDES  
 L1 244675 AMINO(W)ACIDS OR PEPTIDES

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=> numbering()scheme
      1330 NUMBERING
      1 NUMBERINGS
      1331 NUMBERING
      (NUMBERING OR NUMBERINGS)
      25780 SCHEME
      9115 SCHEMES
      33172 SCHEME
      (SCHEME OR SCHEMES)
L2      41 NUMBERING(W)SCHEME
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=> 12 and 11
L3      9 L2 AND L1
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=> d ti 1-9
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L3 ANSWER 1 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI A circularly permuted myoglobin possesses a folded structure and ligand
binding similar to those of the wild-type protein but with a reduced
thermodynamic stability.
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L3 ANSWER 2 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI The molecular determinants of ionic regulatory differences between brain
and kidney Na+/Ca2+ exchanger (NCX1) isoforms.
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L3 ANSWER 3 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Differential diagnosis of Alzheimer disease with cerebrospinal fluid
levels of tau protein phosphorylated at threonine 231.
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L3 ANSWER 4 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Novel extended-spectrum TEM-type b-lactamase from an Escherichia coli
isolate resistant to ceftazidime and susceptible to cephalothin.
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L3 ANSWER 5 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Identification of Essential ***Amino*** ***Acids*** within the
Proposed Cu-A Binding Site in Subunit II of cytochrome c oxidase.
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L3 ANSWER 6 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI AMINO ACID SEQUENCE OF RABBIT CARDIAC TROPONIN T.
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L3 ANSWER 7 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI NUCLEOTIDE SEQUENCE OF THE PSEUDOMONAS-PUTIDA CYTOCHROME P-450-CAM GENE
AND ITS EXPRESSION IN ESCHERICHIA-COLI.
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L3 ANSWER 8 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI GLUTATHIONE REDUCTASE EC-1.6.4.2 FROM HUMAN ERYTHROCYTES THE SEQUENCES OF
THE NADPH DOMAIN AND OF THE INTERFACE DOMAIN.
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L3 ANSWER 9 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI GLUTATHIONE REDUCTASE EC-1.6.4.2 FROM HUMAN ERYTHROCYTES AMINO-ACID
SEQUENCE OF THE STRUCTURALLY KNOWN FAD BINDING DOMAIN.
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